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FIGHTING FARM FIRE LOSSES

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An interview with Mr. David J. Price, principal chemical engineer, 1931 *
Bureau of Chemistry and Soils, conducted by Morse Salisbury, this for Radio Service, in the Department of Agriculture period of the National Farm and Home Hour broadcast Tuesday, June 2, by 43 associate stations of the National Broadcasting Company.

SALISBURY:

From time to time in our Farm and Home Hour programs, we have learned about new things in farm fire protection. Mr. David J. Price, who is in charge of chemical engineering investigations for the Bureau of Chemistry and Soils, has spoken to us several times on this topic. Mr. Price also is chairman of the committee on farm fire protection of the National Fire Protection Association. Today, we have asked him to give us some of the important facts his committee has developed.

In a radio talk last year, Mr. Price, you gave us an estimate made by the Farm Fire Protection Committee of the National Fire Protection Association, showing probable annual losses from farm fires of \$100,000,000 and 3,500 lives. Did the loss decrease in 1930?

PRICE:

Unfortunately, the preliminary estimates indicate that the property loss did not decrease in 1930. It probably increased to \$125,000,000. The year 1930 probably saw the biggest farm fire losses in our history.

SALISBURY:

Why was that?

PRICE:

Undoubtedly, because of the disastrous drought. But whatever the cause, the increase in tire loss last year, it seems to me, should spur us on to find means of preventing further heavy damage.

SALISBURY:

What lines of fire protection work seem to offer the most promise of cutting down the losses?

PRICE:

The fire protection people are working along several lines. All of them are important. One way to prevent fires is to put up farm buildings so that they will resist fire, and to locate them so that fire starting in one building won't sweep the whole farmstead. Another way is to make every member of the farm family a fire watchman, alert to remove causes of fires. Protection against lightning is a third. Then there are such items

as safe storage for gasoline and kerosene, fire fighting equipment on the farm, rural fire departments, and better knowledge of how to prevent spontaneous heating and ignition of such farm products as hay.

SALISBURY:

That reminds me that in the spring of 1930, you told us about the experiments to be made at the U. S. livestock and dairy experiment station in Beltsville, Maryland, to find the causes and action of spontaneous ignition of hay. How did the tests turn out?

PRICE:

The drought decidedly hampered those experiments. Every hay grower knows spontaneous heating takes place in damp or undercured hay, especially the legumes. Well, last summer's severe drought cut the alfalfa crop at Beltsville and all through this section to practically nothing. As a result, we had no local hay to work with. We did some experimenting, however, with shipped-in baled hay, which we wet down ourselves, in order to produce heating. But we didn't find anything to cause us to revise our previous recommendations.

SALI SBURY:

Will you repeat those recommendations for us?

PRICE:

Surely:

Cure hay properly before storing.

If the hay must be put away damp or undercured, add salt (one-half of one per cent by weight) to the hay as you place it in the barn or stack.

Stop leaks in the roofs or sides of barns.

Just after storing the hay ventilate it as freely as possible.

If hay in stack or mow is at all suspicious examine it frequently. If you find the hay a few feet from the surface too hot to hold your hand in, inspect it more thoroughly and find out the condition of the interior, then get in touch with your State fire authorities.

SALISBURY:

You spoke of constructing farm buildings of fire-resistant materials as one important means of preventing losses. Suppose I should want to get the facts on this, where should I go to get them?

PRICE:

Write to the United States Department of Agriculture and ask for Farmers' Bulletin 1590-F. Its title is "Fire Protective Construction on the Farm." This bulletin was prepared by a subcommittee of our Farm Fire Protection Committee. The chairman of the subcommittee was Mr. M. C. Betts

of the Department of Agriculture.

SALISBURY:

Were any other new publications issued during the year that will help farm property owners to check the fire menace?

PRICE:

Yes, a number of them. The most comprehensive one issued by the Department of Agriculture is Farmers' Bulletin 1643-F, called, "Fire Safe-guards for the Farm." Dr. Valgren, Mr. Betts, and Mr. Harry E. Roethe of the Bureau of Chemistry and Soils prepared it. Then, there is a new edition of Farmers' Bulletin 1512-F, "Protection of Buildings and Farm Property from Lightning." Mr. Roy N. Covert of the Weather Bureau is the author. Mr. Roethe has briefed down the practical pointers on farm fire prevention into Leaflet 44-L, called "Fires on Farms."

SALISBURY:

I have read all those bulletins, and know that 1643-F, especially, covers the general principles pretty thoroughly. I recall, though, that you have given especial attention recently to storage and use of gasoline and kerosene on farms. Is anything published on that?

PRICE:

Not at present, but Mr. Roethe is at work on a Farmers' Bulletin. I suppose Mr. Eisenhower will announce it to the Farm and Home audience when it is ready for distribution. I am glad you mentioned the subject. It reminds me that carcless use of gasoline and benzine in cleaning clothes at home still causes many horrible tragedies in both farm and city families. I want to remind all of our listeners that it's just too much of a gamble with precious human life to use gasoline at home for cleaning. Folks, last year the Western Actuarial Bureau reported that between 400 and 500 women lost their lives in attempts to clean clothes, gloves, etc., with flammable liquids. I know that the nonflammable liquids aren't quite as efficient cleaners, but I think every woman should use them in preference to such hazardous fluids as gasoline if she must clean clothes at home.

SALISBURY:

In general, what are the recommendations for storage of gasoline and kerosene on the farm?

PRICE:

First, never keep gasoline or kerosene about in open containers.

Second, store small quantities of gasoline up to, say, a gallon, in safety cans.

Third, store large quantities of gasoline or kerosene, either in underground tanks or in drums equipped with pumps.

SALISBURY:

Now, Mr. Price, we've gone over some of the chief items of fire prevention that the farm family can apply. But all of us know, as Dr. Valgren and Mr. Betts, and Mr. Roethe point out in Farmers' Bulletin 1643-F, that even though everybody is supercareful, some farm fires are bound to occur. When they do, it's up to somebody to fight them. And often, they go so fast that the farmer, even if he has good fire fighting equipment about his place, can't get them under control. The answer, of course, is rural fire departments. Have you anything to report on that?

PRICE:

Well, a subcommittee of our committee of the National Fire Protection Association has prepared a report on specifications for rural fire departments. Curtis R. Welborn of the Underwriters' Laboratory was chairman of this subcommittee. He and the other men did a good piece of work. Their report has been published and has been used as a basis, already, for organizing and operating rural fire departments. State laws vary, so that I can't even attempt to lay down in our conversation today the general principles. If your community is thinking of organizing, for fire protection, I suggest the leaders in the project write to the National Fire Protection Association, 60 Batterymarch Street, Boston, for a copy of the report, and also get in touch with the fire marshal of your State.

Let me make just this one comment about rural fire departments and their work. They can't do much to control a fire that breaks out on your place and gains headway, unless you can provide them with water.

A cistern holding even as little as 500 gallons may mean the difference between a disaster and a small fire loss. A stream close by the farmstead, even a little one, may be your salvation. I know one farmer who provided fire fighting water by damming a little stream only about 6 inches deep. The inexpensive dam backed up a pond two feet deep with enough water to supply the community fire department's pumper.

SALISBURY:

Many thanks, Mr. Price, for your comments and information on farm fire protection. Now, Farm and Home Folks, let me give you a list of the publications mentioned by Mr. Price. Send your requests for Department of Agriculture publications to the Department at Washington, D. C., or in care of your Farm and Home Hour station. Here the publications are:

Farmers' Bulletins — 1512-F, "Protection of Buildings and Farm Property from Lightning;" 1590-F, "Fire-Protective Construction on the Farm;" 1643-F, "Fire Safeguards for the Farm." Leaflet 44-L, "Fires on Farms." Send your request for the report on rural fire departments to the National Fire Protection Association, 60 Batterymarch Street, Boston, Massachusetts.